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## Patent Abstracts of Japan

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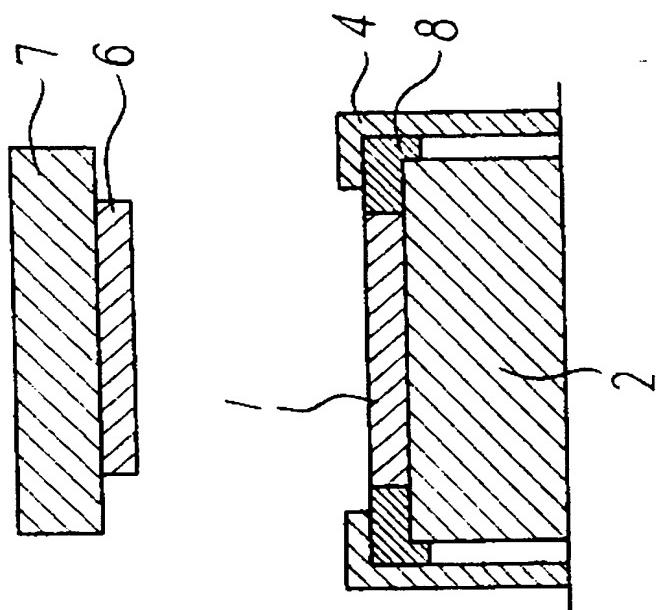
APPLICATION DATE : 25-05-81  
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APPLICANT : ULVAC CORP;

INVENTOR : FUJIOKA TOSHIAKI;

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TITLE : CATHODE FOR INSULATOR TARGET  
IN RF SPUTTERING



ABSTRACT : PURPOSE: To maintain the potential over the entire surface of an insulator target constant and to prevent abnormal electric discharging by inserting a spacer of the same material as that of the target between an RF electrode placed with said target and a metallic earth shield.

CONSTITUTION: A spacer 8 of the same material as that of an insulator target 1 is inserted into the gap between an RF electrode 2 placed thereon with the target 1 and a metallic earth shield 4. High frequency electric power is applied between the electrode 2 and a substrate holding electrode 7 to cause glow discharging. The surface of the target 1 is heated by this and the vapor of the target material itself evaporating from the surface is ionized and stuck on the substrate 6 on the electrode 7, whereby a desired insulation film is formed. In this way, the potential over the entire surface of the target 1 is maintained constant by the spacer 8 filling the gap and abnormal electric discharging is prevented.

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